

ABSTRACT

Antimicrobial activity of fractions from ethyl acetat extract of endophytic fungus *Penicillium oxalicum* derived from sponge *Homaxinella sp.*

Penicillium oxalicum is one of endophytic fungus isolated from sponge *Homaxinella sp.*. Previous study showed that ethyl acetat extract of *P. oxalicum* posses antimicrobial activity against *Escherichia coli*, *Staphylococcus aureus*, and *Bacillus subtillis*. The purpose of the current study is to determine the antimicrobial activity of fractions from ethyl acetat extract of *P. oxalicum*. The assay was conducted by using disc diffusion method.

The results showed that fractions 2-4 and 6-8 with concentration 100 µg/disc had antimicrobial activity against *Escherichia coli* ATCC 8739 with inhibition zone 8.2 – 9.3 mm. Fractions 2-5 and 7-9 with concentration 100 µg/disc were able to provide antimicrobial activity against *Staphylococcus aureus* ATCC 6538 with inhibition zone 7.3 – 8.9 mm. Fractions 2-8 with concentration 100 µg/disc gave antimicrobial activity against *Bacillus subtillis* ATCC 6633 with inhibition zone 8.5 – 10.2 mm.

Keywords : Antimicrobial activity, fractions, endophytic fungi, *P. oxalicum*, sponge *Homaxinella sp.*